

What is claimed is:

1. A method for producing an  $\alpha$ -alumina particulate comprising steps of (Ia) and (Ib), or a step of (II):

(Ia) removing water from a mixture containing water,  
5 a seed crystal and a hydrolysate obtained by hydrolysis of an aluminum compound under conditions of a pH of 5 or less and a temperature of 60°C or less,

(Ib) calcining the resulted powder,

(II) calcining a mixed powder containing 75-1 wt% of  
10 an  $\alpha$ -alumina precursor (in terms of  $\text{Al}_2\text{O}_3$ ) and 25-99 wt% of a seed crystal (in terms of oxide of metal component).

2. The method according to Claim 1, wherein the aluminum compound in the step (Ia) is an aluminum salt or aluminum alkoxide.

15 3. The method according to Claim 2, wherein the aluminum salt is at least one selected from the group consisting of aluminum inorganic salts and aluminum organic salts.

4. The method according to Claim 3, wherein the aluminum inorganic salt is at least one selected from the group  
20 consisting of aluminum nitrate, aluminum sulfate, aluminum ammonium sulfate and ammonium aluminum carbonate hydroxide.

5. The method according to Claim 3, wherein the aluminum organic salt is at least one selected from the group consisting of aluminum oxalate, aluminum acetate, aluminum  
25 stearate, aluminum lactate and aluminum laurate.

6. The method according to Claim 1, wherein a base is added to an aluminum compound before hydrolysis thereof in the step (Ia).

7. The method according to Claim 1, wherein the hydrolysate and seed crystal are dispersed in water in the step (Ia).

8. The method according to Claim 1, wherein the weight ratio of hydrolysate (in terms of  $\text{Al}_2\text{O}_3$ )/seed crystal (in terms of oxide of metal component) is 99-1 wt%/1-99 wt% in the step (Ia).

9. The method according to Claim 1, wherein the amount of water is 150-1000 parts by weight based on 100 parts by weight of the total amount of the hydrolysate and seed crystal in the step (Ia).

10. The method according to Claim 1, wherein the  $\alpha$ -alumina precursor in the step (II) is at least one selected from the group consisting of aluminum salts, aluminum alkoxides, transition alumina, aluminum hydroxide and hydrolysates of aluminum compounds.

11. The method according to Claim 1, wherein the amount of the  $\alpha$ -alumina precursor is 75-50 wt% (in terms of  $\text{Al}_2\text{O}_3$ ) and the amount of the seed crystal is 25-50 wt% (in terms of oxide of metal component) in the step (II).

12. The method according to Claim 1, wherein the seed crystal in the step (Ia) or (II) is a metal oxide.

13. The method according to Claim 12, wherein the metal oxide is at least one selected from the group consisting of alumina, iron oxide and chromium oxide.

14. The method according to Claim 1, wherein calcination  
5 is conducted at 600-1000°C in the step (Ib) or (II).